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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/164,429	09/30/1998	WING-KUEN CHUNG	081862.P112	6657

7590 12/29/2004  
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EXAMINER

HARPER, KEVIN C

ART UNIT PAPER NUMBER

2666

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/164,429

Applicant(s)

CHUNG ET AL.

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 92-119, 131-141 and 161-168 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 92-119, 131-141 and 161-168 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 17, 2004 has been entered.

***Response to Arguments***

Applicant's arguments filed September 17, 2004 have been fully considered but they are not persuasive.

1. Applicant argued that Chang in view of Binkerd does not disclose a message sent over a packet network that causes an "on hook" signal to be generated. However, Chang discloses a message sent over a network in response to a call attempt being disconnected with a remote destination (fig. 5B, step 150). Binkerd discloses sending an on-hook signal at call termination to an interface (fig. 15, items T17 and T19; col. 22, lines 38-46). The motivation for the combination is to send an on-hook signal to an interface at call termination to communicate the call termination (col. 17, lines 46-50).

***Claim Objections***

2. Claims 167-168 are objected to because "remote telephone interface" in each claim lacks antecedent basis. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 92, 94, 100, 102, 108-112, 119, 131-135, 139, 141 and 161 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (US 6,118,864) in view of Guy et al. (US 5,940,479) and Binkerd et al. (US 4,623,760).

3. Regarding claims 92, 100, 108, 131, 139, 141 and 161, Chang discloses a method comprising initiating a call to a remote telephone interface (Figure 1, item 19) at a telephone interface (item 36; Figure 2A step 72), establishing a connection toward a remote interface through a second telephone interface (Figure 1, items 22 and 8) over a packet data network (item 32, 34 and 4; col. 3, lines 30-32), generating an inherent second ring signal and starting an inherent timer for measuring a time period that the second ring signal is applied (Figure 5B, step 148; note: ring-no-answer), ceasing the second ring signal (note: ring-no-answer) and sending a message a message through the packet network (Figure 5B, step 150). However, Chang does not disclose generating a first ring signal at a telephone interface. Guy discloses transmitting a ring signal from one device to another (Figure 1, items 101B and 128; col. 8, lines 10-13). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to generate a ring signal at a telephone interface in the invention of Chang to indicate a desire to make a connection between devices. Further, Chang in view of Guy does not disclose generating an off-hook signal at the telephone interface or ceasing the off-hook signal and generating an on-hook signal at the telephone interface. Binkerd discloses providing an off-hook signal and then removing the off-hook signal and providing an on-hook signal to a telephone interface to indicate the status of a line (Figure 1, items

Art Unit: 2666

102 and 109; Figure 23, timing diagram 2501-2502; col. 16, lines 38-42 and col. 25, lines 52-68).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to generate an off-hook signal and then cease an off-hook signal and generate an on-hook signal at the telephone interface in the invention of Chang in view of Guy in order to communicate the line status between devices to indicate a call has been ended or disconnected. Further regarding claims 131 and 139, the system includes a computer readable medium (Figure 1B, memory) having instructions for performing the method (Figure 1B, CPU).

4. Regarding claim 119, the system of Chang comprises a MAC (items 8, 22 and 32) for receiving a data stream and a voice channel, packetizing the voice channel and multiplexing the data stream and packetized voice channel (Figure 1, item 34) over a trunk which is inherently configurable (col. 3, lines 35-38 and 44-46). The MAC comprises an inherent CPU coupled to ports (items 38 and 24 and connection to clients and router 34) and a memory (col. 5, lines 25-32).

5. Regarding claims 94, 102, 115, 135 and 163, the network is an IP network (Chang, col. 3, lines 45-47).

6. Regarding claim 109, the second system comprises a VOPS control system (Chang, Figure 1C, items 2 and 39).

7. Regarding claims 110-112, the third interface resides at a PBX or central office/PSTN (Chang, Figure 1A, item 36; Figure 1D, item 50).

8. Regarding claims 132-134, a ring signal to denote an indication of an incoming call is provided to a PBX or central office/PSTN (Chang, Figure 1A, item 36; Figure 1d, item 50; Figure 5B, step 148).

Claims 93, 101, 113-114 and 162 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Guy and Binkerd, as applied to claims 50, 72, 102, 108 or 161 above, and further in view of Meubus et al. (US 5,793,858).

9. Regarding claims 93, 101 and 113-114, Chang in view of Guy and Binkerd does not disclose that that a timer for a ring-no-answer lasts a particular duration. Meubus discloses that a configurable and fixed timer lasts preferably up to 72 seconds. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a ring-no-answer timer for up to 72 seconds in the invention of Chang in view of Guy and Binkerd in order to allow a sufficient time for a called telephone to be answered. Further, Chang in view of Guy, Binkerd, and Meubus does not disclose that the timer lasts 2 to 3 minutes. One skilled in the art would recognize that a ring-no-answer timer of 2 to 3 minutes allows additional time for called telephone to be answered (MPEP 2144.05 (II)). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a timer of 2 to 3 minutes in the invention of Chang in view of Guy, Binkerd and Meubus in order to allow additional time for a call to be answered.

Claims 95-97, 103-105, 116-118, 136-138 and 164-166 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Guy and Binkerd, as applied to claims 108, 131, 142 or 151 above, and further in view of English et al. (US 5,305,308).

10. Regarding claims 95-97, 103-105, 116-118, 125-127, 136-138 and 164-166, Chang in view of Guy and Binkerd does not disclose that the packet network uses frame relay, HDLC or ATM. English discloses transmitting voice information over a network that uses frame relay, HDLC or ATM (col. 3, lines 50-55; col. 12, lines 9-20; and col. 45, lines 59-61). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to use frame relay, HDLC

Art Unit: 2666

or ATM in the packet network of Chang in view of Guy and Binkerd to use a preferred, suitable and standardized alternative protocol in a packet network.

Claims 106-107 and 166-168 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Guy and Binkerd, as applied to claims 92 or 100, above, and further in view of Fuentes (US 5,812,541) or Lowry et al. (US 5,970,066).

11. Regarding claims 106-107, Chang in view of Guy and Binkerd does not disclose that the telephone interface or remote telephone interface is located at a PBX or central office. Fuentes and Lowry disclose an interface to a packet network located at a PBX (Figure 1, items 1 and 19) and central office (Figure 1, items 14 and 52), respectively. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to locate an interface to a packet network at a PBX or central office in the invention of Chang in view of Guy and Binkerd in order to conveniently control and administer the interconnection at the location of the PBX or central office.

Claim 140 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Guy and Binkerd, as applied to claims 120, 131 or 151, above, and further in view of Menon et al. (US 6,208,627).

12. Chang discloses using DTMF digits from a caller to determine a destination. However, Chang in view of Guy and Binkerd does not disclose using a secondary dial tone. Menon discloses using a secondary dial tone in order to notify a user that an outgoing trunk from a PBX has been seized (col. 44, lines 35-45). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a secondary dial tone in the invention of Chang in view of Guy and Binkerd in order to provide a dial tone for local calls within the PBX and another dial tone for calls outside the PBX.

Art Unit: 2666

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:30 AM to 8:00 PM ET.

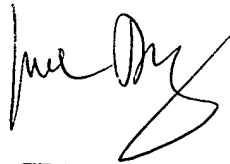
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only (applications must be associated with a customer number). For more information about the PAIR system, see [pair.uspto.gov](http://pair.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

December 24, 2004



**FRANK DUONG  
PRIMARY EXAMINER**